

IN THE SPECIFICATION:

Page 8, delete the second full paragraph and insert the following paragraph:

A1
The gas diffusion control 9 is formed with the porous body. Allowing pores of the gas diffusion control 9 to have bore diameters in a range from 100 angstrom (0.01 μm) to 1 μm can cause the Knudsen diffusion around the gas diffusion control 9. The Knudsen diffusion is dependent on pressure of the measurement gas. Thereby, the cathode 4 generates an electric current value that parameterizes an oxygen concentration and a pressure. Especially, in the case of atmosphere whose oxygen concentration is known (in other words, the oxygen concentration parameter can be regarded as a known constant), an oxygen pumping current value generated can correspond to the pressure of the measurement gas substantially on one-to-one basis. Therefore, a pressure value of the measurement gas can be obtained by detecting the oxygen pumping current.